

Patent Claims:

1. Measurement system (1) for determining the time (31) that a person needs to run over one of a number of selectable different out-and-back courses (4a-4e), with the out-and-back courses (4a-4e) having a common starting point that is the finish point (2) at the same time, and having different turning points (3a-3d) that are in different directions from the starting point (2), and with devices (6a, 6b) placed between the starting and finish point (2) and the turning points (3a-3d) to produce measurement pulses when they are passed, which are connected (9) to communicate with a timing clock (7) in the sense of turning it on and off.
2. Measurement system pursuant to Claim 1, **characterized by the fact that** the distances (10) between the starting and finish point (2) and the individual turning points (3a-3d) are equal to one another.
3. Measurement system pursuant to Claim 2, **characterized by the fact that** there are more than two turning points (3a-3d) that lie at the corners of an equilateral polygon.
4. Measurement system pursuant to one of the claims 1 to 3, **characterized by the fact that** the distances (11) between the places (6a, 6b) at which the measurement pulses are produced for each out-and-back course (4a-e) and the starting and finish point (2) are all equal.
5. Measurement system pursuant to one of the claims 1 to 4, **characterized by the fact that** a first device (6a) for producing the measurement pulse is associated with the starting and finish point (2), and a second device (6b) is associated with the turning points (3a-d) of each individual out-and-back course (4a-e).

6. Measurement system pursuant to Claim 5, **characterized by the fact that** the distances (11) between the places at which the measurement pulse from the first device (6a) is produced for each out-and-back course (4a-e) and the starting and finish point (2) are all the same.
7. Measurement system pursuant to Claim 5 or 6, **characterized by the fact that** the distances (11) between the places at which the measurement pulse from the second device (6b) is produced for each out-and-back course (4a-e) and the particular turning points (3a-d) are all the same.
8. Measurement system pursuant to one of the claims 1 to 7, **characterized by the fact that** viewed from the starting and finish point (2), an optically or acoustically detectable signaling device (12) is associated with each turning point (3a-d), and that the signaling devices (12) can be turned on and off independently of one another by means of a transmitter (13).
9. Measurement system pursuant to Claim 8, **characterized by the fact that** only one at a time of the signaling devices (12) can be turned on unpredictably and arbitrarily, while the others cannot.
10. Measurement system pursuant to Claim 9, **characterized by the fact that** the signaling devices (12) can be turned on by a transmitter designed as a random number generator.
11. Measurement system pursuant to one of the claims 8 to 10, **characterized by the fact that** the signaling devices (12) are the same as one another and emit the same signals.
12. Measurement system pursuant to one of the claims 1 to 11, **characterized by the fact that** the devices (6a, 6b) for producing the measurement pulses contain contactless trip mechanisms.
13. Measurement system pursuant to Claim 12, **characterized by the fact that** the contactless trip mechanisms are light barriers (14+15).

14. Measurement system pursuant to one of the claims 1 to 13, **characterized by the fact that** the timing clock is connected (16) to communicate with a display panel (8).
15. Measurement system pursuant to one of the claims 1 to 14, **characterized by the fact that** the devices (6a, 6b) for producing the measurement pulses, the timing clock (7), and any display panel (8), as well as any signaling devices (12), are portable units that can be set up as such outdoors or under cover.
16. Measurement system pursuant to one of the claims 1 to 15, **characterized by the fact that** the communication connection (9) between the devices (6a, 6b) for producing the measurement pulses and the timing clock (7) is wireless.
17. Measurement system pursuant to one of the claims 1 to 16, **characterized by the fact that** the connection between the transmitter (13) and the signaling devices (12) is wireless.
18. Measurement system pursuant to one of the claims 1 to 17, **characterized by the fact that** a hand token (26) to be picked up and carried by the particular person is associated with each turning point (3a; 3b; 3c; 3d).
19. Measurement system pursuant to one of the claims 1 to 18, **characterized by the fact that** an electrical circuit (27) is provided to detect, store, and optionally interpret the individual personal times (30a; 30b; 30c; 32).
20. Measurement system pursuant to one of the claims 1 to 19, **characterized by the fact that** the individual components of the measurement system are provided with advertising spaces.
21. Measurement system pursuant to one of the claims 1 to 20, **characterized by the fact that** there are distance-measuring devices (34a-e) between the measurement points that act together with a receiver module (33) so that the measurement cycle is unleashed only at given distances between prescribed measurement points.

22. Measurement system pursuant to one of the claims 1 to 21, **characterized by the fact that** there is a barrier (35) that cannot be crossed, between the starting and finish point and the first measurement point.